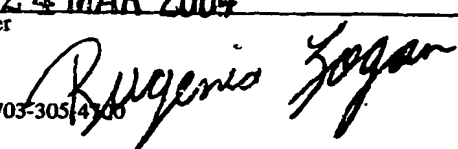


INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/30877

A. CLASSIFICATION OF SUBJECT MATTER												
IPC(7) : H04R 11/04; B60L 3/00; H04N 7/18; A47G 1/24; G08B 5/00; B60R 1/12; G02B 5/08 US CL : 381/365,86;307/10.1;348/148;248/481;340/815.4;362/494;359/839 According to International Patent Classification (IPC) or to both national classification and IPC												
B. FIELDS SEARCHED												
Minimum documentation searched (classification system followed by classification symbols) U.S. : Please See Continuation Sheet												
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched												
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X	US 2002/0032510 A1 (TURNBULL et al) 14 March 2002 (14.03.2002), Figures 3-9, 17	1,2,8,12-22, 24										
---	18, paragraphs 10-48, paragraphs 92-109, paragraph 137	-----										
Y		23, 25-74										
Y	US 2002/0110255 A1 (KILLION et al) 15 August 2002 (15.08.2002), Figures 4 and 5, paragraphs 62 and 63	23, 25-74										
Y	US 5,828,012 A (REPOLLEET et al) 27 October 1998 (27.10.1998), Figures 3 and 4, col. 4, line 18 through col. 6, line 63	23, 25-74										
Y,P	US 6,614,911 B1 (WATSON et al.) 02 September 2003 (02.09.2003), Figures 2-11, 16-21 and 24-26, col. 8, line 13 through col. 21, line 47.	1,2,8, 12-74										
Y	US 2002/0110256 A1 (WATSON et al.) 15 August 2002 (15.08.2002), Figures 2-7,9-11,16-21,24-26,39 and 41-43 paragraphs 83-207	1,2,8,12-74										
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.												
* Special categories of cited documents: <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"B" earlier application or patent published on or after the international filing date</td> <td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"B" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention											
"B" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone											
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art											
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family											
"P" document published prior to the international filing date but later than the priority date claimed												
Date of the actual completion of the international search		Date of mailing of the international search report										
11 March 2004 (11.03.2004)		24 MAR 2004										
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230		Authorized officer Curtis Kuntz Telephone No. 703-305-4700 										

INTERNATIONAL SEARCH REPORT

PCT/US03/30877

Continuation of B. FIELDS SEARCHED Item 1:

381/82,86,94.5,110,361,365; 307/10.1; 348/148; 362/492,494; 340/425.5,438,691.6,815.4; 248/481;
359/265,267,602,604,838,839,871,872.